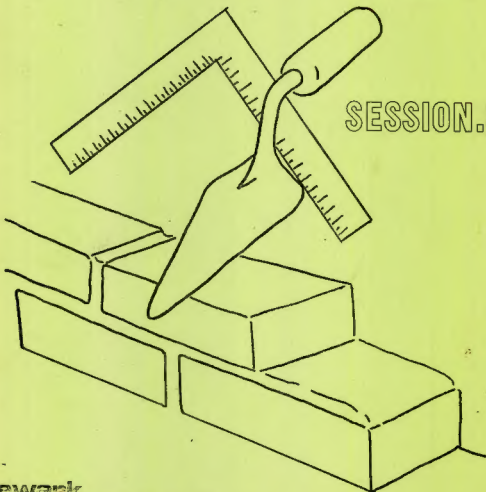


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SESSION. 2



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HOMEOWNERS TRAINING COURSE

AT

NEWARK REDEVELOPMENT AND HOUSING AUTHORITY

MAINTENANCE TRAINING CENTER

4 Sheffield Drive

Newark, N.J. 07104

Saturday, October 29, 1977

9:00 a.m. - 1:00 p.m.

Instructor: Ralph Zanga

M A S O N R Y

Session #1 Plastering and Stucco

- a) Cutting and preparing cracks
- b) Mixing plaster
- c) How to apply
- d) Cleaning and finishing
- e) Same procedure on stucco

MASONRY

SESSION 2 Stucco Patching and Plaster Patching

Cement plaster, stucco and mortar all consist of the same standard formulation: One (1) part portland cement to three (3) parts clean, coarse sand or other aggregate, such as perlite or vermiculite. To simplify matters, most hardware and building supply stores sell ready-mixed sand and cement in various-sized bags. All these mixtures require is the adding of enough water to make an easily workable mix of exactly the right consistency. Properly prepared stucco or mortar should be stiff enough to hold its shape, yet pliable enough to be easily molded without crumbling under the action of the trowel.

To repair minor cracks and to replace small sections which have broken off on corners or along the bottom of a wall, here is the procedure to be followed:

- 1) Remove all loose or broken pieces of old stucco and cement. If necessary, use a hammer and a cold chisel to chip off stubborn sections and cut back to where the old material is still adhering firmly.
- 2) Undercut the sides or edges of each crack so that the opening is wider at the bottom than it is at the surface. This assures a good mechanical bond or "key" when the new mortar is applied.
- 3) Use a stiff brush to dust out all loose crumbling material and wet the edges of the patch or crack thoroughly with clean water. Fill the opening with freshly mixed mortar, packing it in tightly with a pointed trowel.

- 4) Deeper cracks or openings which go all the way through the masonry and down to the lath should be filled in two applications. The first coat should be built up to within 1/4 inch from the top and it should be allowed to set for about two days. Wet it down again before applying the second coat.

Larger patches (more than about 12 inches across) usually require that whole sections be ripped out completely and replaced from the lath out. This calls for a bit more work, though the same basic procedure is followed. Rip off all of the old defective masonry and examine the exposed wood or metal lath for signs of rotting or rusting. If it looks bad, rip the lath off down to the bare siding. Nail on new building paper with large-headed galvanized nails, and then cover with rustproof wire lath. This metal lath should be nailed on with special double-headed furring nails which are designed to hold the mesh away from the wall a fraction of an inch.

Stucco is generally applied in three coats. The first and second coats are known as the "scratch" and "brown" coats respectively. Both consist of a standard mortar mix as described above. Use a square plasterer's trowel and scrub the first coat on so that it goes completely through the metal mesh and bonds securely behind it. Work from the bottom up, spreading the mortar on until the lath is completely covered.

Allow this scratch coat to stiffen slightly, then cross-scratch the surface with a scrap piece of wire mesh or a serrated tool. Let this harden for about two days, keeping it damp for at least twenty-four (24) hours by sprinkling occasionally with a fine mist.

The second, or brown, coat is troweled on after first thoroughly wetting down the surface of the scratch coat. This application should be thick enough to even out all irregularities in the scratch coat and it should bring the surface up to within 1/8 of an inch of the surrounding wall surface. It must be pressed on firmly to insure a good bond.

Allow this coat to harden for another seven days, and again wet it down thoroughly before applying the final coat. The finish coat can consist of the same mixture, but it usually has some lime added to make it more workable. One common formula consists of one (1) part cement, one (1) part lime and four (4) parts sand. If color is required, add lime-proof powdered colors which are available at most hardware stores and lumberyards.

Trowel this finish coat to a smooth even finish which is flush with the surrounding surface. To achieve a uniform, sand-finished texture, allow the mortar to stiffen slightly, then rub, in a circular motion, with a wooden float. To match a rough, spattered type of finish, thin out the stucco slightly with additional water and extra sand. Then spatter the wet material on with a whisk broom or a stiff brush while the final coat is still soft. Other textures are achieved by working the final coat with a trowel, by dashing on pebbles or other granular material or by roughing up the surface with a sponge, a stiff brush or a wad of burlap.

PATCH HOLES IN WALLBOARD OR PLASTER

YOUR PROBLEM

- There's a hole in the wall.
- There's a crack in the wall.

WHAT YOU NEED

- Choose one of the two types of patching compounds—

Spackling compound is convenient for small jobs but is more expensive. It can be bought as a powder or ready-mixed.

Patching plaster can be bought in larger packages and costs less. Both spackling powder and patching plaster need to be mixed with water.

- Putty knife
- Knife
- Sandpaper—medium grit
- Old cloth or a paint brush

HOW-TO

1. Remove any loose plaster. With a knife, scrape out plaster from the back edges of the crack until the back of the crack is wider than the front surface. (Fig. 1)
2. Thoroughly dampen the surface of the crack with a wet cloth or paint brush. (Fig. 2)



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

3. Prepare patching compound according to directions on package. Mix only a small amount the first time. (Fig. 3)
4. You can fill small holes with the patching mixture. Be sure to press the mixture until it completely fills the hole. Smooth the surface with the putty knife. (Fig. 4) After the patch has dried, you can sand it. Wrap the sandpaper around a small piece of wood. This makes the surface even. (Fig. 5)
5. Larger holes or cracks should be filled step-by-step. First, partly fill the hole. Let the patch dry. This gives a base for the final fill. Add a second batch of compound. Let dry. Sand until smooth. (Fig. 6)
6. You may need to fill in behind large holes with wadded newspaper. Start patching by working in from all sides. Let dry. Apply another layer around the new edge. Repeat until the hole is filled. After the patch has dried, sand until smooth. (Fig. 7)

NOTE:

If the walls have a textured surface, you'll want to make the patch match it while the plaster is still wet. You might need a sponge or comb to do the texturing. (Fig. 8)